Quality Control

Memo

Page 1

Thursday, March 03, 2011 8:42:15 AM Item ID: D3492-041 Accept Setup Start **Revision ID:** Stop Item Name: Plug Assembly **Start Qty: 120.00 Start Date:** 3/3/2011 **Cust Item ID:** Req'd Qty: 120.00 **Required Date: 3/11/2011 Customer:** Reference: Start Run Date://-03-3 Tooling: Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID Description Code Qty Stamp **Run Hours** Qty Number **Revision Nbr Draw Nbr** D3492 Rev C 100 0.00 Hardinge CNC LATHE SMALL Hardinge 0.00 Memo Hardinge CNC Lathe Small 1-Turn as per Folio FA633 & Dwg D3492 □ Dwg Rev: □ Folio Rev: 110 QC2- Inspect parts off machine FAI/FAIB 0.00 0.00 Memo Quality Control 120 QC8- Inspect parts - second check 0.00 1,000 11/03/

Dart Aerospace Ltd

	P a o o								
W/O:			WO	RK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	Jory:	NCR: Yes	No DQ	A:	Date: _	
	Re	esolution:	Disposition	1:	_ QA: N/C CI	osed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCF	?)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
DATE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng				Chief Eng	QC Inspector
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Work Order ID 66937

Thursday, March 03, 2011 8:42:15 AM



Page 2

Item ID:

D3492-041

Accept

Setup Start



Revision ID:

Item Name:

Plug Assembly

Start Date:

Required Date: 3/11/2011

3/3/2011

Start Oty: 120.00 Req'd Qty: 120.00

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan: _____ Date: ____ Tooling:

Date:

SPC (Y/N):

Date:

Tool # Plan

Code

Date:

Start

Reject

Oty

Run

Accept

Otv

Stop

Stop



Insp.

Stamp

Reject

Number

Sequence ID/

Work Center ID

130

Small Fab

Small Fab

Operation Description

Small Fab

Set Up/ **Run Hours**

1-Deburr if neccesary □2-Tumble

0.00

11/3/11

140

OC5- Inspect part completeness to step on W/O

0.00

Memo

Memo

Memo

0.00

Quality Control

150

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

0.00

Dart Aerospac	e Ltd
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W/O:			W	ORK ORDER CHANG	SES					
DATE	STEP	PRO	OCEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					·					
Part No	:	PAR #:	Fault Cate	egory:	NCF	R: Yes I	No DQ	A :	Date: _	
	R	esolution:							Date: _	
NCR:			WORK ORD	ER NON-CONFORM	ANCE	(NCR)				
DATE	STEP	Description of NC	Initial	Corrective Action Secondary Action Description	tion B	Sign &		ation	Approval	Approval
	2	Section A	Chief Eng	Chief Eng		Date	Sect	on C	Chief Eng	QC Inspector
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Work Order ID 66937

Thursday, March 03, 2011 8:42:15 AM



Page 3

Item ID:

D3492-041

Accept

Setup Start

Stop

Start



Revision ID:

Item Name: Plug Assembly

Start Date:

3/3/2011

Start Otv: 120.00

Reg'd Qty: 120.00



Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan: Date:

Tooling:

Date:

Run

Required Date: 3/11/2011

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/

Work Center ID

160

Powdercoat

Powder Coating

Operation Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Set Up/ **Run Hours**

0.00

Tool # Plan

Accept Qty Code

Reject Qty

Reject Number

Insp. Stamp

Memo
(Flat End Only)□START TIME:
□FINISH TIME:

170

OC

Quality Control

OC3- Inspect Part Finish

Memo

0.00

0.00

180

Packaging

Identify as per dwg & Stock Location: FPH

0.00

Memo

0.00

Packaging

Dart A	erospa	ce Ltd
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W/O:			V	ORK ORDER CHANG	ES				
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Ca	tegory:	_ NCR: Yes	No DQ	A:	Date: _	
	R	esolution:	Disposit	ion:	QA: N/C C	losed:		Date: _	
NCR:		V .	VORK OR	DER NON-CONFORMA	ANCE (NCI	R)			
DATE	STEP	Description of NC	Initial	Corrective Action Section	ion B Sign		cation	Approval	Approval
		Section A	Chief Eng	Action Description Chief Eng	Date		tion C	Chief Eng	QC Inspector
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						1			

Work Order ID 66937

Thursday, March 03, 2011 8:42:15 AM



Page 4

Item ID:

D3492-041

Accept



Setup Start

Stop



Revision ID:

Start Date:

Item Name:

Plug Assembly

3/3/2011

Start Qty: 120.00

Req'd Qty: 120.00

Cust Item ID:

Customer:

Reference:

A	nn	rov	งลไ	8:	

Process Plan:

Date:

Tooling:

Date:

Start Run



Required Date: 3/11/2011

QC: _ _

Operation

Description

Date:_____

SPC (Y/N):

Set Up/

Date:

Stop



Sequence ID/

Work Center ID

190

Memo

QC21- Final Inspection - Work Order Release

Run Hours

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Oty

Reject Insp. Number

Stamp

Quality Control

0.00

CL 11103/16

Dart Aerospace Ltd

W/O:			W	ORK ORDER CHANG	GES					
DATE	STEP	PRC	OCEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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					:					
Part No	:	PAR #:	Fault Cate	egory:	NCR:	Yes N	lo DQ	A:	Date:	
	R	esolution:	Disposition	on:	QA: N	VC Clo	sed:		Date: _	·
NCR:		•	WORK ORD	ER NON-CONFORM	ANCE	(NCR))			
DATE	STEP	Description of NC			ction B		Verific	cation	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	į	Sign & Date	Secti	on C	Chief Eng	QC Inspector
1										
							-			-

Picklist Print

Thursday, March 03, 2011 8:42:21 AM

Work Order ID: 66937

Parent Item: D3492-041

Parent Item Name:

Plug Assembly



Start Date: 3/3/2011

Required Date: 3/11/2011

Start Qty: 120.00

Required Qty: 120.00

Comments:

IPP rev A 06.03.03 New Issue

EC IPP Rev:B 06-08-28 As per Rev B JLM

IPP Rev:C 07-12-06 Rev C dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.625		Purchased	No			100	f	34.5000	0.0625	7.894737	1 1	(>)	/ . D

6061-T6 Round Bar .625"

Location	Loc Oty	Loc Code
MAT	24	
116963	24	
MAT012	10.5	
112697	10.5	

Dart Aerospace Ltd

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W/O:			WO	RK ORDER CHANGE	ES		_		
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Dort No.		DAD #-	Fault Oats		NOD: Yes	Na BO	<u> </u>	D-4	
Part No		PAR #:							
	Re	solution:						Date: _ 	
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NCR	1)			
DATE	STEP	Description of NC		Corrective Action Section			cation	Approval	Approval
	OIL:	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Sect	ion C	Chief Eng	QC Inspector

-NAS1611 PLUG (SEE TABLE) D3492-XX PLUG (SEE TABLE)-

D3492-XXX PLUG PARTS LIST

QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X						D3492-043	PLUG ASSEMBLY
		Х					D3492-045	PLUG ASSEMBLY
			X				D3492-047	PLUG ASSEMBLY
				X			D3492-049	PLUG ASSEMBLY
					X		D3492-051	PLUG ASSEMBLY
						Х	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
		1					D3492-5	PLUG
			1				D3492-7	PLUG
				1			D3492-9	PLUG
	L				1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
				1			NAS1611-016	O-RING

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE

DEO ATTACHED

ADD -049/-051/-053, CHANGE DRAWING FORMAT	PH	07.10.05
ADD -047; UPEATE DIM A FOR -045	PH	06.05.11
NEW ISSUE	PH	06.01.04
DESCRIPTION	BY	DATE
	ADD -047; UPL:ATE DIM A FOR -045 NEW ISSUE	ADD-047; UPLATE DIM A FOR -045 PH NEW ISSUE PH

DESIGN #		DART AFRO	SPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA		
CHECKED	, ,	DRAWING NO.	REV. C	
MFG. APPR.	W 0	D3492	SHEET 1 OF	
APPROVED	M	TITLE	SCALE	
DE APPR.	-	PLUG	2:1	
DATE 07.1	0.05		DART AEROSPACE LTD	

5

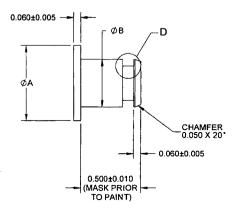
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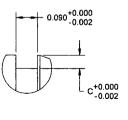
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Dart Aerospace Ltd WORK ORDER CHANGES W/O: **Approval Approval** DATE STEP Qty PROCEDURE CHANGE By Date Chief Eng / QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ Resolution: ________ Disposition: _______ QA: N/C Closed: _______ Date: _______ WORK ORDER NON-CONFORMANCE (NCR)

		Description of NC		Corrective Action Section B	Verification	Approval	Approval	
DATE	STEP Description of NC Section A		Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto
-							-	

-POWDER COAT THESE FACES ONLY PER NOTE 2





DETAIL D

D3492-XX PLUG

D3492-XX PLUG MACHINING DETAILS

P/N	Α	В	С	MATERIAL SPEC
Ď3492-1	0.625	0.394	0.055	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M6061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.520	0.045	M6061T6R0.750

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

DEO ATTACHED



DESIGN P44 DRAWN		DART AEROS	DART AEROSPACE LTD		
		HAWKESBURY, ONTARIO, CANADA			
CHECKED	17	DRAWING NO.	REV. C		
MFG. APPR.		D3492	SHEET 2 OF		
APPROVED	Mark	TITLE	SCALE		
DE APPR.	diff	PLUG	4:1		
DATE 07.10.05		COPYRIGHT © 2007 BY DA THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SI NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COM-	PPLIED ON THE EXPRESS CONDITION THAT IT IS BRUNCATED TO ANY OTHER PERSON WITHOUT		

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W/O:			WO	RK ORDER CHANG	ES					
DATE	STEP	PRO	OCEDURE CHAN	IGE	E	Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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						ļ				
Part No	:	PAR #:	Fault Categ	ory:	_ NCR:	Yes N	o DQ	A:	_ Date: _	
	R	esolution:	Disposition	_ Disposition: QA: N				A: N/C Closed:		
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NCR)				
DATE	STEP	Description of NC			tion B			cation	Approval Chief Eng	Approval QC Inspecto
DAIL	JIL.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date		Section C			
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									4	

-DRAWING NO. D3492	TITLE PLUG		REV		EROSPACE LTD ERING ORDER		SHEET 1	
DRAWN A.	JS	CHECKED	1/2	MFG. APPR.	B	APPROVED M		## ,
DATE 08.1	1.05	DATE	08 11.05	DATE	08.11.05	DATE 08/11/2		18/11/05
		AS SHOWN:						
<u>IS:</u>								
			<u>D:</u>	3492-XX PLUG	MACHINING DE	TAILS		

0.045 M6061T6R0.750

WAS:

w/o 46937

D3492-XX PLUG MACHINING DETAILS

D3492-13

0.750

0.510

P/N	Α	В	С	MATERIAL SPEC
<u> </u>				
		I		<u></u>
D0400 40	0.750	0.520	0.045	M6061T6R0.750



Dart Aerospace	Ltd
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W/O:			WO	RK ORDER CHANG	GES				
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
- M.A.									
Part No	:	PAR #:	Fault Categ	ory:	NCR: Yes	No DQ	A:	Date: _	
	Res	solution:	Disposition	:	QA: N/C C	losed:		Date: _	
NCR:			WORK ORDE	R NON-CONFORM	IANCE (NCF	₹)			
DATE	STEP	Description of NC	Initial		Section B Sign & Section				Approval
	0.2.	Section A	Chief Eng	Action Description Chief Eng	Date			Chief Eng	QC Inspector
		·							

DART AEROSPACE LTD	Work Order:	66837
	Part Number:	13492-041
Description: 1/45	Part realization	
Inspection Dwg: \$3492 , Rev:		Page 1 of 1
mapection bug. 17 3 77 2		

	FIRST /	ARTICLE IN	SPECTIO	N CHE	CKLIST	
	x	First Artic	le X	Prote	otype	
Drawing Dimension	Tolerance	Actual Dimension	Accept	Rejest	Method of Inspection	Comments.
8-625	÷.070	6,624				51-7
-060	±.00\$	061				
0,394	+010	:373				
.500	= 019	500				
.020	+.00/-002	-09d			<u> </u>	
-055	4.000/-002	-054		-		
-060	±,005	1050		<u> </u>		
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		<u> </u>				
	1-1-					
Measured by:	<u> </u>	Audited by:	.SL		Prototype App	oroval:
Date:	11/3/11	Date:	11/63/14			Date:
Deta :	Change					levised by Approve

l		Date.	(// 3///	Date: 11103117		
1	Day	Date	Change		Revised by	Approved
1	Rev	Date			KJ/JLM	
ł	Α		New Issue		10/0CIVI	